

ABSTRACT

The present invention provides polymorphisms of ABCG2 polypeptide and polynucleotide coding therefor, which is related to the intracellular accumulation of indolocarbazole compounds, as well as methods for detecting the polymorphisms, comprising collecting a sample from mammals, and determining a polymorphism of the nucleotide sequence of *ABCG2* gene or a polymorphism of the amino acid sequence of ABCG2 polypeptide. In a preferred embodiment of the present invention, the polymorphism of the nucleotide sequence is one or more of single nucleotide polymorphisms at positions selected from the group consisting of 34, 376 and 421 of SEQ ID NO:1, and the polymorphism of the amino acid sequence is one or more of amino acid polymorphisms at positions consisting of 12, 126, and 141 of SEQ ID NO:2.